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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,762	12/26/2001	Mark A. Schmisser	42390P12808	5769
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BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			EXAMINER PARK, EDWARD K	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/032,762

Applicant(s)

SCHMISSEUR ET AL.

Examiner

Edward K. Park

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 12, 20, 21, 34, and 35 objected to because of the following informalities: the phrase "the core processing system" in line 3 of claim 1 lacks antecedence and should read "a core processing system." Furthermore, "addition" in line 8 of the same claim should read "additional." Regarding claim 5, the phrase "the interrupt vector" in line 6 of the claim lacks antecedence and should read "an interrupt vector." Regarding claim 12, the phrase "the interrupt vector" in line 5 of the claim lacks antecedence and should read "an interrupt vector." Regarding claims 20, 21, 34, and 35, "the instructions" lacks antecedence and should read "the one or more instructions." Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6; 9-12, 15-19, 22-26, and 29-33 rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (U.S. 5,898,869).

4. Regarding claim 1, Anderson discloses a system comprising: a core processing circuit (13); and a host processing system (11) coupled to the core processing system

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through a host bridge (17), the host processing system comprising: logic to place the core processing circuit in a reset state (column 2, lines 65-66); and logic to load a reset vector to one or more registers at a boot address associated with the core processing circuit (column 6, lines 13-15 in view of column 8, lines 7-9; Anderson discloses the reset vector as comprising an "initial program," which necessarily must be loaded to registers), the reset vector comprising one or more instructions to fetch additional instructions to initialize the core processing circuit upon release from the release state (column 8, lines 24-26; Anderson discloses an included loader program to download a program from host 11 to FLASH memory, which necessarily must include fetching additional instructions).

5. Regarding claim 2, Anderson discloses the system of claim 1, wherein the registers are formed in a memory (39) coupled to the core processing circuit (31) through a data bus (26).

6. Regarding claim 3, Anderson discloses the system of claim 1, wherein the host processing system comprises a system memory (39), and wherein the reset vector comprises at least one instruction to fetch data from a system memory (column 2, line 66 through column 3, line 2) coupled to the core processing circuit through the host bridge (17).

7. Regarding claim 4, Anderson discloses the system of claim 3, wherein the host processing system further comprises logic to set an address translation unit to fetch instructions from the system memory in response to requests from the core processing unit (column 2, lines 48-50, via processor address bus 24).

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8. Regarding claim 5, Anderson discloses the system of claim 3, wherein the host processing system further comprises logic to load the reset vector in the registers while the core processing circuit is in the reset state (column 6, lines 5-7), and wherein the core processing circuit comprises logic to initiate the system memory in response to execution of an interrupt vector upon release from the reset state (column 6, lines 13-15). Anderson does not explicitly disclose the initiation of one or more write bus transactions at an address translation unit nor one or more read bus transactions at the address translation unit addressed to the system memory, however said transactions would necessarily have to be present in order for the host processing system to properly communicate with the core processing circuit.

9. Regarding claim 6, Anderson discloses the system of claim 1, wherein the host processing system further comprises logic to release the core processing circuit from the reset state in response to loading the reset vector at the boot address (column 2, lines 37-39).

10. Regarding claim 9, Anderson discloses a method comprising: placing a core processing unit (13) in a reset state (column 2, lines 65-66); and loading a reset vector to one or more registers at a boot address associated with the core processing circuit (column 6, lines 13-15 in view of column 8, lines 7-9; Anderson discloses the reset vector as comprising an "initial program," which necessarily must be loaded to registers), the reset vector comprising one or more instructions to fetch additional instructions from a system memory (column 8, lines 24-26; Anderson discloses an included loader program to download a program from host 11 to FLASH memory, which

necessarily must include fetching additional instructions) coupled to the core processing circuit through a host bridge (17) of a host processing system (11).

11. Regarding claim 10, Anderson discloses the method of claim 9, the method further comprising loading the reset vector to a boot address in registers formed in a memory (39) coupled to the core processing circuit (31) through a data bus (26).

12. Regarding claim 11, Anderson discloses the method of claim 9, wherein the method further comprises setting an address translation unit to fetch instructions from the system memory in response to requests from the core processing circuit (column 2, lines 48-50, via processor address bus 24).

13. Regarding claim 12, Anderson discloses the method of claim 9, wherein the method further comprises: loading the reset vector in the registers while the core processing circuit is in the reset state (column 6, lines 5-7); and initiating the system memory in response to execution of the interrupt vector upon release of the core processing circuit from the reset state (column 6, lines 13-15). Anderson does not explicitly disclose initiating of one or more write bus transactions at an address translation unit nor one or more read bus transactions at the address translation unit addressed to the system memory, however said transactions would necessarily have to be present in order for the host processing system to properly communicate with the core processing circuit.

14. Regarding claim 15, Anderson discloses a method comprising: placing a core processing circuit (13) in a reset state (column 2, lines 65-66); and loading instructions from a system memory of a host processing system to one or more registers at a boot

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address associated with the core processing circuit (column 6, lines 13-15 in view of column 8, lines 7-9; Anderson discloses the reset vector as comprising an "initial program," which necessarily must be loaded to registers), the instructions comprising one or more instructions to initialize the core processing circuit upon release of the core processing circuit from the reset state (column 8, lines 24-26; Anderson discloses an included loader program to download a program from host 11 to FLASH memory, which necessarily must include fetching additional instructions).

15. Regarding claim 16, Anderson discloses the method of claim 15, wherein the method further comprises transmitting the instructions from the system memory through a host bridge of the host processing system (17).

16. Regarding claim 17, Anderson discloses the method of claim 15, the method further comprising releasing the core processing circuit from the reset state in response to loading the instructions at the boot address (column 2, lines 37-39).

17. Regarding claim 18, Anderson discloses the method further comprising loading the instructions to a boot address in registers formed in a memory (39) coupled to the core processing circuit (31) through a data bus (26).

18. Regarding claim 19, Anderson discloses the method of claim 15, wherein the method further comprises setting an address translation unit to fetch instructions from the system memory in response to requests from the core processing circuit (column 2, lines 48-50, via processor address bus 24).

19. Regarding claim 22, Anderson discloses an article comprising: a storage medium comprising machine-readable instructions encoded there on for: placing a core

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processing circuit (13) in a reset state (column 2, lines 65-66); and loading a reset vector to one or more registers at a boot address associated with the core processing circuit (column 6, lines 13-15 in view of column 8, lines 7-9; Anderson discloses the reset vector as comprising an "initial program," which necessarily must be loaded to registers), the reset vector comprising one or more instructions to fetch additional instructions from a system memory (column 8, lines 24-26; Anderson discloses an included loader program to download a program from host 11 to FLASH memory, which necessarily must include fetching additional instructions) coupled to the core processing circuit through a host bridge (17) of a host processing system (11).

20. Regarding claim 23, Anderson discloses the article of claim 22, wherein the storage medium further comprises machine readable instructions stored thereon for loading the reset vector to a boot address in registers formed in a memory (39) coupled to the core processing circuit (31) through a data bus (26).

21. Regarding claim 24, Anderson discloses the article of claim 22, wherein the storage medium further comprises machine readable instructions stored thereon for setting an address translation unit to fetch instructions from the system memory in response to requests from the core processing circuit (column 2, lines 48-50, via processor address bus 24).

22. Regarding claim 25, Anderson discloses the article of claim 22, wherein the storage medium further comprises machine readable instructions stored thereon for loading the reset vector in the registers while the core processing circuit is in the reset state (column 6, lines 5-7). Anderson does not explicitly disclose initiating of one or

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more write bus transactions at an address translation unit, however said transactions would necessarily have to be present in order to properly load the registers.

23. Regarding claim 26, Anderson discloses the article of claim 22, wherein the storage medium further comprises machine readable instructions stored thereon for releasing the core processing circuit from the reset state in response to loading the reset vector at the boot address (column 2, lines 37-39).

24. Regarding claim 29, Anderson discloses the article comprising: a storage medium comprising machine-readable instructions encoded there on for: placing a core processing circuit (13) in a reset state (column 2, lines 65-66); and loading instructions from a system memory of a host processing system to one or more registers at a boot address associated with the core processing circuit (column 6, lines 13-15 in view of column 8, lines 7-9; Anderson discloses the reset vector as comprising an "initial program," which necessarily must be loaded to registers), the instructions comprising one or more instructions to initialize the core processing circuit upon release of the core processing circuit from the reset state (column 8, lines 24-26; Anderson discloses an included loader program to download a program from host 11 to FLASH memory, which necessarily must include fetching additional instructions).

25. Regarding claim 30, Anderson discloses the article of claim 29, wherein the storage medium further comprises machine readable instructions stored thereon for transmitting the instructions from the system memory through a host bridge of the host processing system (17).

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26. Regarding claim 31, Anderson discloses the article of claim 29, wherein the storage medium further comprises machine readable instructions stored thereon for releasing the core processing circuit from the reset state in response to loading the instructions at the boot address (column 2, lines 37-39).

27. Regarding claim 32, Anderson discloses the article of claim 29, wherein the storage medium further comprises machine readable instructions stored thereon for loading the instructions to a boot address in registers formed in a memory (39) coupled to the core processing circuit (31) through a data bus (26).

28. Regarding claim 33, Anderson discloses the article of claim 29, wherein the storage medium further comprises machine readable instructions stored thereon for setting an address translation unit to fetch instructions from the system memory in response to requests from the core processing circuit (column 2, lines 48-50, via processor address bus 24).

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 7, 13, 20, 27, and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. 5,898,869).

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31. Regarding claims 7, 13, 20, 27, and 34, Anderson discloses all of the limitations of respective independent claims 1, 9, 15, 22, and 29, as noted above. However, though Anderson discloses the additional instructions comprising "diagnostic routines" (column 3, lines 13-14), Anderson does not explicitly disclose the system wherein the additional instructions comprise instructions to commence a power-on self test procedure. The examiner takes Official Notice that power-on self test procedures are a well known type of diagnostic routine. It would have been obvious at the time that the invention was made to use power-on self test procedures for the diagnostic routines disclosed by Anderson. The motivation for doing so would have been to assure the integrity of the information stored on the core processing circuit.

32. Claims 8, 14, 21, 28, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. 5,898,869) in view of Klein (U.S. 6,226,224).

33. Regarding claims 8, 14, 21, 28, and 35, Anderson discloses all of the limitations of respective independent claims 7, 13, 20, 27, and 34 as noted above. However, Anderson does not disclose the method wherein the [additional] instructions further comprise instructions to launch an operating system to the core processing circuit. Klein teaches a system comprising: a core processing circuit (figure 2, item 106); logic to place the core processing circuit in a reset state (page 2, column 3, lines 25-27); and logic to load a reset vector to one or more registers at a boot address associated with the core processing circuit (page 3, column 5, lines 44-47), the reset vector comprising one or more instructions to fetch additional instructions to initialize the core processing circuit upon release from the reset state (page 2, column 4, lines 9-13), similar to

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Anderson. Klein further teaches the method wherein the [additional] instructions further comprise instructions to launch an operating system to the core processing circuit (page 2, column 4, lines 13-15) in order to "bring the PC up to a state that can be used by a human operator" (page 2, column 4, lines 16-17). It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate Klein's teachings of loading the operating system with Anderson's disclosure of a system comprising a core processing circuit initialization with a host processing system. The motivation for doing so would have been to accommodate for the use of the system by a human operator.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith (U.S. 6,292,409) and Nouri (6,122,746).

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward K. Park whose telephone number is (571) 272-5859. The examiner can normally be reached on M-F, 8:30 AM - 5:00 PM.

36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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